

NYC Buildings Department 280 Broadway, New York, NY 10007

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#### **BUILDINGS BULLETIN 2010-028**

**Technical** 

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Purpose: This document clarifies the compliance requirements for grease interceptors (grease traps),

and serves to remind that such devices are also subject to the applicable requirements of

the Department of Environmental Protection ("LFP").

Related PC 1003 Code/Zoning 15 RCNY 19-11

Section(s):

**Subject(s):** Plumbing, grease trap; Plumbing, grease interceptor; Plumbing, kitchen

Section PC 1003 of the New York City Plunbing Code provides the installation requirements for grease interceptors (grease traps) to receive the dianage from fixtures and equipment with grease-laden waste located in food preparation areas, such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias or restaurants, or clubs. In addition, due to the fact that the interceptors are a component of the waste discharge system, the installation and sizing of crease interceptors are also regulated by the Rules of the DEP. The additional installation and sizing requirements are found in 15 RCNY §19-11, "Best Management Practices (BMPs) for Non-Residential Direct and Indirect Dischargers of Grease to the Public Sewer System", as annexed on page 2 through 4 of this document. Therefore, grease interceptors shall be sized to meet the sizing requirements in both section PC 1003 and 15 RCNY §19-11.

For applications subjected on or after July 1, 2009, only those prefabricated grease interceptors that conform to PDI G101, ASME A1 2.14.3 or ASME A112.14.4 shall be installed. Such interceptors shall not require Materials & Equipment Acceptance (MEA) approvals from the Department of Buildings provided they are installed in accordance with 15 RCNY §19-11, referenced standards in section PC 1003.3.4, and manufacturer's instructions. Such profabricated grease interceptors shall be indicated on the approved construction plans as required by rules of the Department of Buildings.

### From Title 15 of the Rules of the City of New York

### §19-11 Best Management Practices (BMPs) for Non-Residential Direct and Indirect Dischargers of Grease to the Public Sewer System.

- (a) Grease Interceptors shall be installed in waste lines which may receive grease from non-residential direct and indirect dischargers, including, but not limited to, those leading from pot wash sinks, woks, soup or stock kettles, food scrap sinks, scullery sinks, meat and/or poultry and/or fish preparation sinks, floor craims, automatic dishwashers, scraper sinks or other similar plumbing fixtures in all restaurants, kitchers, cafeterias, clubs, butcher shops, slaughterhouses, fish markets, supermarket food processing areas, delicale sens or other non-residential establishments where grease may be introduced into the drainage system. Sizing of grease interceptors shall comply with the criteria specified in this section, including applicable Tables I and/or II.
- (b) All prefabricated grease interceptors shall be approved by the New York City Loard of Standards & Appeals prior to July 10, 1991, approved by the New York City Department of Buildings Materials and Equipment Acceptance Division prior to July 1, 2008, or shall conform to FOI G101, ASME A112.14.3 or ASME A112.14.4 and shall be installed in accordance with the manufacturer's instructions.
- (c) The method for determining the minimum size/capacity of a grease interceptor is provided in Tables I and II below:

Table I		Table II	
Aggregate volume in cubic inches of all fixtures listed in this table.	Minimum grease interceptor retaining capacity for: pot sinks, food prep. Sinks, scillery sinks and floor drangs which are used for washdown purpoles only.	Ag gregate volume in cubic inches of all fixtures, vessels and receptacles listed in this table.	Minimum grease interceptor retaining capacity for: scraper sinks, woks, automatic dishwashers and any fixture receiving discharge from soup and stock kettles.*
up to 2,462	ò (10)	up to 1,231	8 (lb)
2,463 to 4,312	14 (lb)	1,232 to 2,156	14 (lb)
4,313 to 6,160	20 (lb)	2,157 to 3,080	20 (lb)
6,161 to 9,240	30 (lb)	3,081 to 4,620	30 (lb)
9,241 to 12,320	40 (lb)	4,621 to 6,160	40 (lb)
12,321 to 15,400	50 (lb)	6,161 to 7,700	50 (lb)
15,401 to 21 560	70 (lb)	7,701 to 10,780	70 (lb)
21,561 to 30,800	100 (lb)	10,781 to 15,400	100 (lb)
30,801 o 46,200	150 (lb)	15,401 to 23,100	150 (lb)
45,201 to 61,600	200 (lb)	23,101 to 30,800	200 (lb)
61 631 to 92,400	300 (lb)	30,801 to 46,200	300 (lb)
92,401 to 123,000	400 (lb)	46,201 to 61,600	400 (lb)

Note: Aggregate volume is the maximum volume (e.g. length times width times height to the overflow if rectangular) in cubic inches of all fixtures, vessels and receptacles that may flow simultaneously through the interceptor.

<sup>\*</sup> Subject to the sizing requirements specified in sections 19-11(i) through (p).

If a premises contains fixtures listed in Table I and fixtures, vessels and/or receptacles listed in Table II, all of which are tributary to the same grease interceptor, then the method for determining the minimum grease interceptor retaining capacity in pounds shall be to separately calculate the retaining capacities for the fixtures in Table I and the fixtures, vessels and/or receptacles in Table II. These retaining capacities shall then be added together to obtain the total minimum grease interceptor retaining capacity required for such premises.

If the aggregate volumes listed in Tables I and II are exceeded, then a New York State Licensed Professional Engineer or a New York State Registered Architect shall extrapolate the appropriate grease interceptor sizing requirements.

- (d) Vented flow control fittings shall be installed to insure that the flow capacity of the grease interceptor as specified by the manufacturer is not exceeded. Flow-control valves and/or fittings that are manually adjustable may not be used to limit flow to an interceptor.
- (e) Grease interceptors must have a retention capacity in pounds of at leas twice the numerical flow-through rate in gallons-per-minute.
- (f) Grease interceptors shall remove an average of 90 percent or more of the grease or other extractable matter in the wastewater.
- (g) The temperature of water entering a grease interceptor shall not exceed 180°F.
- (h) All grease interceptors must be readily accessible for inspection by duly authorized employees of the Department.
- (i) Grease interceptors for scraper sinks shall be sized in accordance with Table II, except that the minimum retaining capacity shall be at least 30 pounds. When determining the aggregate volume of all fixtures, vessels and receptacles specified in Table II that may flow simultaneously through an interceptor, a minimum of 3,465 cubic inches per scraper sink shall be used.
- (j) Dischargers from automatic dishwashers must be tributary to a grease interceptor. Whether connected separately or in conjunction with other fixtures, the total volume in gallons of each automatic dishwasher shall be converted to cubic inches and added to the aggregate volume of Table II.
- (k) Discharges f om high-temperature sanitizer cycles of automatic dishwashers or from dedicated sanitization compartments of sinks need not be tributary to a grease interceptor.
- (l) Floor crains which may receive grease must be tributary to a grease interceptor. The size of such grease interceptor shall be determined as follows:
  - (1) For floor drains where grease maybe discharged during washdowns, Table I shall be used, and an additional 1,540 cubic inches per floor drain shall be added to the aggregate volume.
  - (2) Grease interceptors for floor drains which receive discharges directly from fixtures, receptacles and/or vessels shall be sized in accordance with the grease interceptor sizing requirements for the fixtures, vessels and/or receptacles tributary to it.

- (3) For floor drains having a diameter larger than 3 inches or for trench and/or trough drains, a New York State Licensed Professional Engineer or a New York State Registered Architect shall extrapolate the appropriate sizing requirements of the tributary grease interceptor based on (1) and/or (2) above.
- (m) For soup and/or stock kettles, the calculation of aggregate volume to be used in Table II shall be made based upon the total volume of all soup and stock kettles tributary to the grease interceptor even if the discharges from these vessels are made to a floor drain or similar fixture.
- (n) Where woks, either alone or in conjunction with other types of fixtures, are tributary to a grease interceptor, each wok shall be deemed to contribute 1,617 cubic inches to the aggregate volume of Table II.
- (o) Discharges from the cleaning of kitchen hoods which may extract grease from cooking operations must be made to receptacles or floor drains that are tributary to a grease interceptor. The sizing of the tributary grease interceptor must account for such discharges using standard engineering practice. For kitchen hoods with automatic rinse cycles, the tributary grease interceptor must be sized to account for the peak flow from the automatic rinse cycle as specified by the manufacturer.
- (p) Interceptors smaller than those described in Tables I and II may be used, but only if connected in parallel to another interceptor(s), and the aggregate capacity of such interceptors must either equal or exceed the interceptor capacity required by Tables I an/or II. For parallel connections, vented flow control fixtures must be installed on each interceptor.
- (q) Grease interceptors shall be properly installed, maintained and operated to insure that the requirements of this section and other applicable sections of the regulations are met. This shall include routine cleaning and grease removal from the interceptor as needed to insure the proper operation of the interceptors.
- (r) New York State Licensed Professional Engineers and New York State Registered Architects may petition the Commissioner in writing for acceptance of an alternative pretreatment device, technology, equipment or procedures varying from, but equivalent to, those listed in this section. Such a petition must contain detailed documentation and calculations substantiating their equivalency. In no event shall any alternative pretreatment device, technology equipment or procedures be less stringent than the requirements of this section.
- (s) Notwithstanding any other provision of this section, (1) existing grease interceptors shall conform to the specific requirements of this section no later than one year after the effective date of this section, and (2) grease interceptors it stalled after the effective date of this section pursuant to an application filed before such effective date shall conform to the specific requirements of this section no later than 90 days after such effective date.
- (t) Notwithstanding anything contained in section 19-11 the Commissioner in his discretion may require any gross-interceptor to be installed at any time and to have a retention capacity equal to those listed in Tables I and or II.